

TRANSLATION PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference LeA29 111-PC	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 93/01651	International filing date (day/month/year) 28.06.93	Priority date (day/month/year) 09.07.92
International Patent Classification (IPC) or national classification and IPC C08G18/66		
Applicant BAYER AKTIENGESELLSCHAFT et al		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input checked="" type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application

Date of submission of the demand 28.06.93	Date of completion of this report 27.05.94
Name and mailing address of the IPEA/ EP Fachstelle N	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application N.
PCT/EP93/01651

I. Basis of the report

1. This report has been drawn on the basis of:

- ☒ the international application as originally filed.
- ☐ the description, pages _____, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____,
- ☐ the claims, pages _____, as originally filed,
pages _____, as amended under Article 19,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____,
- ☐ the drawings, sheets/fig _____, as originally filed,
sheets/fig _____, filed with the demand,
sheets/fig _____, filed with the letter of _____,
sheets/fig _____, filed with the letter of _____,

2. The amendments have resulted in the cancellation of: pages: _____
sheets of drawings/figures No.: _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

II. Priority

1. ☐ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed.
- ☐ translation of the earlier application whose priority has been claimed.
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid.

Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 93/01651

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims 1-8	YES
	Claims	NO
Inventive Step (IS)	Claims 1-8	YES
	Claims	NO
Industrial Applicability (IA)	Claims 1-8	YES
	Claims	NO

2. CITATIONS AND EXPLANATIONS

Novelty

The subject matter of the present claims 1 to 8 is novel, having regard to the prior art cited in the international search report. EP-A-0 463 493 (D1), which is considered to be the closest prior art, does not disclose a process for producing hard foams wherein 1) polyisocyanates, 2) compounds with a molecular weight of 400 to 10000 which react with isocyanates, 3) CFC-free organic propellants, 4) flameproofing agents, 5) crosslinking agents with a molecular weight of 32 to 399 and, optionally, 6) known auxiliaries and additives are reacted, components 2), 4) and 5) being used as a formulation in the amounts specified in claim 1 and the NCO number lying between 200 and 600.

Inventive step

The subject matter of the present claims 1 to 8 also involves an inventive step, because there is no hint of the claimed process in D1, taken either separately or in combination with another international search report citation. The reasons are as follows:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 93/01651

Supplemental Box
(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box [No.]: V.2

D1 discloses a process for producing hard PU foams by reacting together the above-mentioned components 1) to 6), component 3) comprising an aqueous solution of alkali carboxylates.

The process claimed in the present claims is distinguished from the process known from D1 in that components 2), 4) and 5) are used as a formulation in the amounts specified in claim 1.

Because of this measure, hard PU foams produced by the subject matter of the application possess better dimensional stability, i.e., undergo less shrinkage, than the foams produced by the process of D1 (see comparative examples).

Since this measure was not suggested by the prior art, the presence of an inventive step can be acknowledged.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP93/01651

VI. Certain documents cited

1. Certain published documents

<u>Application N . Patent No.</u>	<u>Publication date (day/month/year)</u>	<u>Filing date (day/month/year)</u>	<u>Priority date (valid claim) (day/month/year)</u>
WO 92/16573	01/10/92	10/03/92	20/03/91

2. Non-written disclosures

<u>Kind of non-written disclosure</u>	<u>Date of non-written disclosure (day/month/year)</u>	<u>Date of written disclosure referring to non-written disclosure (day/month/year)</u>

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

In line 26 on page 9, the word "more" should be inserted before "foamable", otherwise the sentence in lines 26 to 28 does not make sense.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The application does not comply with the requirements of PCT Article 6, because claim 1 is not clear for the following reasons:

1.) The expression "organic propellant" is inconsistent with the description and therefore makes the scope of the subject matter of the claim unclear, since it also includes the CFC-containing propellants explicitly excluded on page 1 of the description.

2.) The details of the composition of the formulation (page 20, lines 4 to 14) are inconsistent: Firstly, the parts by weight of components 2), 4) and 5) should add up to 100 and secondly, the sum of the parts by weight of the above-mentioned components is equal to at least 110 if up to 90 parts by weight of component 2) are present.